RFP-1325 02 (REV 10/97)
Previously RF-46522

CORRES CONTROL
INCOMING LTR NO
00079 RF 98

DUE DATE
ACTION

Department of Energy

ROCKY FLATS FIELD OFFICE
P O BOX 928
GOLDEN COLORADO 80402-0928

0 JAN 98 21: 18

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JAN 16 '98

DIST	LTR	ENC
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TUOR, N.R.		
VOORHEIS, G.M.		
Hylton, D	X	
Greengard, T	X	

COR CONTROL	X	X
ADMN RECORD	X	
PATS/T130G		

Reviewed for Addressee
Corres Control RFP

1/20/98 DK
Date By

Ref Ltr #

DOE ORDER # 5400.1

1/3

Mr Tim Rehder
U S Environmental Protection Agency, Region VIII
999 18th Street, Suite 500
Denver, Colorado 80202-2466

Dear Mr Rehder

The U S. Department of Energy Rocky Flats Field Office is pleased to deliver your copies of the Closeout Report for the Source Removal at the Mound Site Individual Hazardous Substance Site Also enclosed is one copy of Appendix C, which provides additional information The Mound Site Closeout Report was prepared using language from the Rocky Flats Cleanup Agreement Implementation Guidance Document

Since the Environmental Protection Agency has requested cost breakdown information regarding several source removals at Rocky Flats recently, that same information is being provided for this closeout report as follows: (a) the total estimated unburdened project cost was $2,316K, (b) planning and site preparation for the Mound Source Removal cost $580K, (c) project management cost $210K, and (d) excavation, treatment, site restoration, and waste disposition cost $1,526K

Following are the responses to your request for further information concerning the disposition of a contaminated hot spot which was discovered near the Mound Contaminated Soil Feed Stockpile on March 22, 1997.

- *Who performed the original analysis?*

In June 1997, four characterization samples, collected from the three drums of radiologically contaminated soil excavated from the Trench 3/Trench 4 hot spot, were analyzed at the Rocky Flats Environmental Technology Site (Site) under the then-existing gamma spectroscopy program. Safe Sites of Colorado (SSOC) was assigned responsibility for the Site Radiological Control Program by Kaiser-Hill in late February 1997 One element of this functional transfer was the site gamma spectroscopy program, which was established under EG&G in 1993

- *Why was the original analysis in error?*

The error in the original analysis resulted from the use of a counting efficiency factor for a detector and source geometry different than those used to count the samples An erroneous assumption that the use of this efficiency factor would not result in significant error provided the basis for the use of these incorrect values

- *Prior to disposition of the hot spot soils, there was some concern by representatives at the site such that disposal was postponed for several days Please provide further details as to what these issues were, and why concerns of validity and the QA/QC were not addressed prior to placing the material in the excavation*

Quality Assurance of the gamma spectroscopy results was a concern prior to the decision to place this material into the excavation. These concerns addressed the availability of Quality Control Records Radiation Safety Management requested a delay to review the available records and establish a technical basis for the efficiency factor used to calculate the results This review suggested that the gamma spectroscopy data was reliable A significant misunderstanding between technical personnel as to the application of correction factors for the different efficiencies went undetected at that time This mistake resulted in the acceptance of the data, which was later found to be in error

- *Which individuals or organization is responsible for instrumentation calibration/data computation, and who has been performing these tasks in past projects?*

The gamma spectroscopy program was the responsibility of Radiological Protection under EG&G from 1993 to June 1995, Kaiser-Hill from July 1995 to February 1997, and SSOC from February 1997 to the present.

- *Why was the data re-evaluated two weeks following the original decision for putback of these soils?*

Data re-evaluation started two business days after the soil was buried At that point the technical misunderstanding of the application of conversion factors was identified Hand calculations were performed to validate the use of detector efficiency and geometry conversion factors, and confirmatory measurements were performed This work took approximately two weeks. The four samples were sent to an off-site laboratory for comparative analysis

- *What corrective measures will be taken to alleviate such errors in the future?*

Corrective actions include a formal suspension of the gamma spectroscopy program until a comprehensive investigation and a corrective action plan are completed The Site is developing a new gamma spectroscopy program that will correct any identified deficiencies and provide a technically defensible program that meets all Quality Assurance requirements

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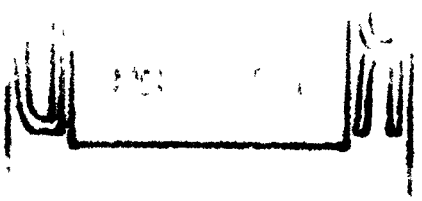

If you should have any technical questions regarding this document, please contact Norma I Castaneda at 966-4226 or contact me at 966-4839

Sincerely,

Steven W. Slaten
RFCA Project Coordinator

Enclosure

cc w/Enc.
G Kleeman, EPA
C Spreng, CDPHE
R Greenberg, EM-45, HQ
Administrative Record

cc w/o Enc
S Gunderson, CDPHE
J Legare, AMEC, RFFO
B April, RLD, RFFO
R Tyler, ECD, RFFO
N Castaneda, ECD, RFFO
D Shelton, K-H
T Greengard, SAIC

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